Scientists

To preserve native habitat and natural physical characteristics, the GGNRA must first study and understand the life and features that comprise each park site. Resource management studies identify critical fields of research at the GGNRA. These include: wildlife ecology; water quality; invasive species; restoration ecology; geology; and ecosystem monitoring; as well as other scientific subjects. Resource samples and data are continually gathered, recorded, and interpreted by scientists to learn how these unique regions react to influences from the human population and to monitor natural changes.

Golden Gate NRA, Park Archives, Presidio Army Museum Negative Collection, GOGA 35256

NPS Photo

The 1965 aerial view of Crissy Field (left) shows the coastal land when it was a military airstrip made from layers of concrete and pavement. After years of removing many levels of fill and contaminated material, Crissy Field is now a thriving wetland (right).

NPS Photo

A Park Service partner collects rock samples during a roads construction project in the Marin Headlands. By monitoring construction projects as they happen, staff can study areas that may not be surveyed for some time in the future.

The GGNRA Natural Resources Division collaborates with the San Francisco Bay Area Network, a network that includes ten other NPS units. Together they conduct studies in sensitive areas; inventory and monitor regions within the park; and ensure projects do not have adverse effects on ecosystems. The park also partners with local educational organizations like the Bay Area Discovery Museum and NatureBridge to help students and the public understand their relationship to the local natural environment.

In addition to internal park projects, the GGNRA allows researchers to apply for research permits to explore different elements of natural history within the park. By using the permit system, the GGNRA resource managers can review each request to ensure studies do not have adverse effects on park resources, such as disturbing sensitive habitats or impacting the population balance of a single species by over-sampling. Researchers come from all over the country to conduct studies within park boundaries. The data collected contributes not only to the researcher's project, but to the wider body of scientific knowledge.

Based on study results, the GGNRA focuses its attention on preventing habitat loss; inventorying the diverse plants and animals found within park boundaries; and restoring the ecological balance of different areas. Crissy Field is a key example of successful habitat restoration in the GGNRA—a piece of land returned to natural tidal wetland from a former military airfield. Park staff monitored Crissy Field for years, tracking variables that affected the development of the re-established marshlands. By using previously collected data and comparing it to current conditions, management decisions were made for a successful ecological balance, and Crissy Field is now a habitat that supports hundreds of species.

New answers from scientific research will lead to fresh questions or present an opportunity to revisit past theories. This ongoing science-based management will aid the understanding and preservation of the park's resources for future generations.

NPS Photo

Soil monitoring is an important tool in managing park ecosystems. From soil tests scientists determine the mineral, water, and nutrient content, which contributes to healthy plant habitats.